Professional and Managerial Branch Engineering Group Engineering Associate Series

## WATER UTILITIES ENGINEER ASSOCIATE

9/99 (SAC)

## Summary

Under general supervision, plan, develop and implement assigned engineering projects and supervise technical and clerical personnel, as assigned.

## Typical Duties

Prepare water and wastewater facilities, construction and other engineering projects plans, specifications and estimates. Involves: performing design drafting and making related computations; determining if projects will require adjusting or relocating water and sewer lines; coordinating projects with local utilities to insure construction will not conflict with existing or proposed underground or overhead utilities; collaborating with Utilities' divisions managers on projects related to water supply and distribution, wastewater treatment or similar process engineering system activities to improve Utility operating efficiency; preparing complex surveys for metes and bounds and legal descriptions; platting profiles and cross-sections; obtaining required right-of-way easements.

Monitor contracted Water Utilities' construction and other projects to ensure that quality and engineering standards are met. Involves: interpreting plans and specifications of Water Utilities' projects being completed under contract; reviewing, evaluating and correcting contract documents and other documents; conducting field visits and inspections; inspecting and testing workmanship and materials used in construction projects; reporting deficiencies to contractor during warranty period; reviewing and checking bid estimates.

Supervise assigned personnel. Involves: scheduling, assigning, instructing, guiding, checking and evaluating work; arranging for or engaging in employee training and development; enforcing personnel rules and regulations, standards of conduct, work attendance, and safe working practices; counseling, motivating and maintaining harmonious working relationships among subordinates; interviewing applicants and recommending selection.

Perform other professional managerial duties. Involves: substituting for supervisor or subordinates during temporary absences to maintain continuity of operation, or for coworkers regarding designated issues, if assigned; maintaining a variety of complex records; representing the Water Utilities at public hearings and meetings.

## Minimum Qualifications

Training and Experience: Graduation from an accredited college or university with a Bachelor's Degree in Civil, Sanitary, Chemical or Environmental Engineering and either two (2) years of professional engineering experience in a water or wastewater utilities operation or one (1) year of such experience and eighteen (18) semester hours graduate coursework in Sanitary, Chemical or Environmental Engineering; or and equivalent combination of training and experience.

Knowledge, Abilities and Skills: Considerable knowledge of: principles and practices of civil engineering as it relates to water and wastewater systems, and facility design and operation; methods, materials, tools and equipment used in water and wastewater construction; cost determination and work efficiency determination techniques. Good knowledge of: administrative and managerial practices and procedures. Some knowledge of: supervisory techniques; federal, state and local laws, codes and ordinances as they apply to water and wastewater utility projects.

Ability to: prepare designs, plans and specifications: determine project costs; interpret plans and specifications and identify defects; supervise, train and evaluate assigned personnel; express oneself clearly and concise, both orally and in writing; establish and maintain effective working relationships with fellow employees and the general public; maintain records and prepare reports.

Skill in safe care and operation of: personal computer or network work station, including computer-aided drafting and design (CADD) software, a motor vehicle.

*Physical Requirements:* Occasionally move across uneven terrain, climb, bend and stoop to conduct field inspections at construction sites and work under all weather conditions; drive through city traffic.

Licenses and Certificates: Texas Class "C" Driver' or equivalent license issued by another state required by time of appointment.

• The title of Water Utilities Engineer may be used provided registration as a professional engineer in the State of Texas has been obtained.

Director of Personnel	Department Head

